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cont.

22.(NEW) A current probe according to claim 19, wherein said coils are arranged in two concentric loops of coils, each loop being connected in series, and each loop having a gap between two of the coils in the loop, said gaps enabling introduction of the conductor into the interior of the concentric loops.

23.(NEW) A current probe according to claim 22, further comprising an electronic circuit for comparing the pickup from external sources experienced by each of the two loops and providing an output which compensates for such pickup, based on the respective dimensions of the loops.

24.(NEW) An electrical energy meter including sensing means which comprises a plurality of relatively fixed coils which define, and are substantially equally spaced apart along, a notional closed path surrounding the conductor, the coils being connected in series in such manner that an unobstructed gap is left between one pair of adjacent coils to enable the conductor to be introduced inside the closed path.

25.(NEW) An electrical energy meter as claimed in claim 24, further comprising an electrically insulating housing for securing relative to at least two mains cables each having a conductive core surrounded by a sheath of insulating material, the housing including respective electrical contact means for piercing the insulating sheath of each cable to make contact with the core, said sensing means for providing an output corresponding to the current flowing in at least one of the cables, and circuit means for calculating and displaying electrical energy as a function of the voltage across the contact means and the output of the sensing means.

26.(NEW) An electrical energy meter according to claim 25, wherein the housing comprises first and second parts which are movable with respect to one another from a first

conc. position in which the cables may be introduced into the housing, to a second position in which the cables are secured relative to the housing.

27.(NEW) An electrical energy meter according to claim 26, wherein the movement of the housing parts between the first and second positions causes the electrical contact means to automatically pierce the cables.

28.(NEW) An electrical energy meter according to Claim 26, wherein the housing parts are separate from one another when in the first position, and wherein the housing parts are secured together in the second position.

29.(NEW) An electrical energy meter according to claim 26, wherein the housing parts are connected together in an open position to receive the cables in the first position, and are closed towards one another in the second position to secure the cables therein.

30.(NEW) An electrical energy meter according to claim 26, wherein the first part is a back plate having means for receiving the cables and wherein the second part is a front plate which abuts against the back plate, with the cables held therebetween, one of said back plate and front plate being provided with said contact means, whereby the cables are squeezed onto said contact means when the back and front plates are brought together.

31.(NEW) An electrical energy meter according to claim 26, further comprising means for locking the first and second housing parts together in the second position.

32.(NEW) An electrical energy meter according to claim 31, further comprising security means which co-operate with the locking means to indicate if the locking means has been tampered with.

33.(NEW) An electrical energy meter according to claim 24, wherein all of the power requirements of the meter are drawn from the mains cables.